

REMARKS

Status Summary

Claims 1-26 are pending in the present application. No claims are added, and no claims are cancelled. Therefore, upon entry of this amendment, claims 1-26 will remain pending.

Claim Objections

The claims were objected to as having two claims numbered 24. The second instance of claim 24 has been renumbered as claim 26. Accordingly, the objection to the claims should now be withdrawn.

Double Patenting

Claims 1-26 are provisionally rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 11, and 26 of U.S. Patent No. 6,839,342. A Terminal Disclaimer disclaiming the terminal part of the patent term of any patent that issues from the instant application that would extend beyond the term of U.S. Patent No. 6,839,342 is attached hereto. Accordingly, the double patenting rejection should be withdrawn.

Claim Rejections - 35 U.S.C. § 101

Claims 21-26 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 21-26 have been amended to recite a computer readable medium having stored thereon executable instructions that when executed by a processor of the

computer control the computer to perform the recited signaling and conversion steps of a gateway. Support for the amendment is found by the references to a gateway throughout the specification (see e.g., page 8, line 17-page 9, line 15) as performing the indicated functions. A person of ordinary skill in the telecommunications art would understand such a telecommunications gateway to include such a computer readable medium to perform the indicated functions. A computer readable medium having stored thereon executable instructions that when executed by the processor of a computer control the computer to perform steps constitutes an article of manufacture under 35 U.S.C. §101. The cited portions of the Interim Guidelines in the Office Action do not indicate otherwise. In fact, page 53 of the Interim Guidelines indicate that such subject matter is statutory:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional relationships between the computer program and the rest of the computer which permit the programs functionality to be realized, and is thus statutory. (See Interim Guidelines, page 53.)

Because claims 21-26 recite a computer readable medium that stores computer executable instructions that when executed by a processor of a computer control the computer to perform steps, the claims recite a structural and functional relationship between the computer program and the computer as required by the Interim Guidelines. Accordingly, it is respectfully submitted the rejection of claims 21-26 as being directed to non-statutory subject matter should be withdrawn.

Claim Rejections - 35 U.S.C. § 112

Claim 1 is rejected under 35 U.S.C. § 112, first paragraph, as being a single means claim. (See page 3 of the Official Action.) Claim 1 has been amended to recite that the gateway includes a first interface for receiving signaling information from the Class 5 switch and a second interface for sending signaling information over the BLES network. Support for these amendments is found, for example, in Figure 1, by the interconnections between gateway **18** and Class 5 softswitch **26** and between gateway **18** and BLES network **14**. Because claim 1 recites a gateway with two distinct interfaces, claim 1 is not a single means claim. Accordingly, it is respectfully submitted that the rejection of claim 1 and dependent claims 2-4 should now be withdrawn.

Claims 5, 16, and 25 and their dependent claims 6-13 and 17 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Official Action states that claims 5, 16, and 25 are not clear because of the meaning of "coupling". (See page 4 of the Official Action.) Claims 5, 16, and 25 have been amended to indicate that the gateway eliminates direct coupling between the Class 5 softswitch and the Internet protocol network. It is respectfully submitted that eliminating such direct coupling is clear within the context of claims 5, 16, and 25 and in the corresponding description because the gateway acts as an intermediate device between the Class 5 softswitch and the IP network.. Accordingly, it is respectfully submitted that the rejection of claims 5, 16, and 25 and dependent claims 6-13 and 17 should now be withdrawn.

Claim Rejections - 35 U.S.C. § 103

Claims 1-5 and 7-26 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Technical Report DSL forum TR-036, version 1.0, August 28, 2000, pages 1-41 (hereinafter, "TR-036") in view of U.S. Patent No. 6,775,269 to Kaczmarczyk et al., (hereinafter, "Kaczmarczyk"). This rejection is respectfully traversed.

Independent claims 1, 14, and 21 recite a method, system, and computer readable medium for interfacing between signaling protocols. Each claim recites or has been amended to recite receiving signaling information in a media gateway and call session control format from a Class 5 softswitch. Each claim further recites converting the signaling received from the Class 5 softswitch in the media gateway and call session control format to signaling information in a broadband loop emulation service (BLES) signaling protocol format. Each claim has been amended to recite providing the signaling information in the BLES signaling protocol format over a BLES network and that the gateway provides services over the BLES network in response to instructions received from the Class 5 softswitch in the media gateway and call session control protocol format, where the media gateway and call session control protocol format is a format usable by a media gateway controller to control a media gateway (such as MGCP or MEGACO). Each claim recites that the services provided by the gateway over the BLES network in response to the instructions from the Class 5 softswitch include dial tone generation, hook flash detection, caller identification generation, digit collection, call progress tones, and tone detection. Thus, each claim recites a gateway that communicates with a Class 5 softswitch using a media gateway and call session control protocol format usable by a media gateway controller to control a media gateway, that communicates over a BLES

network using a BLES protocol format, and provides services over the BLES network in response to instructions received from the Class 5 softswitch in the media gateway and call session control protocol format.

There is absolutely no disclosure, teaching, or suggestion in TR-036 or Kaczmarczyk of a gateway that communicates with a Class 5 softswitch using a media gateway and call control protocol format usable by a media gateway controller to control a media gateway, that communicates over a BLES network using a BLES protocol format, and provides services over the BLES network in response to instructions received from the Class 5 softswitch in the media gateway and call control protocol format.

The CO-IWF in TR-036 referred to in the Office Action does not communicate with a Class 5 softswitch, does not communicate with any node using a protocol usable by a media gateway controller to control a media gateway, and does not provide services over a BLES network in response to instructions received using such a protocol. Rather than communicating with a Class 5 softswitch, the CO-IWF is disclosed as communicating with a Class 5 switch (see Figure A-1 on page 24 of TR-036), which would be understood to be a PSTN switching office, rather than a softswitch. Rather than communicating using a media gateway control protocol usable by a media gateway to control a media gateway controller, on the CO-IWF is disclosed as being a protocol translator between PSTN signaling protocols used by PSTN network elements and a BLES network. For example, TR-036 states:

The CO-IWF performs the signaling and bearer methods used by existing telephony equipment, to the signaling and bearer methods defined in this annex (refer to section A.1.3.1 and A.1.3.2). These MUST include at least one of POTS or ISDN/BRA signaling methods. (See Page 25, section A.1.1.2 of TR-036.)

In the above-quoted passage, TR-036 indicates that the CO-IWF converts between existing PSTN signaling protocols and the BLES signaling specified in A.1.3.2. The existing PSTN signaling protocols referred to in TR-036 would not be understood to be a media gateway and call control protocol format because none of these protocols are used by a media gateway controller to control a media gateway. Further, rather than providing the claimed services over the BLES network in response to instructions received in the media gateway control protocol, the CO-IWF is disclosed as a protocol converter. Section A.1.4.1 of TR-036 indicates that Class 5 services “should be supported by a BLES compatible system.” However, TR-036 provides no disclosure, teaching or suggestion of providing those services in response to instructions received in a media gateway control protocol format. Accordingly TR-036 fails to disclose, teach, or suggest a gateway that communicates with a Class 5 softswitch using a media gateway and call session control protocol format usable by a media gateway controller to control a media gateway, that communicates over a BLES network using a BLES protocol format, and provides services over the BLES network in response to instructions received from the Class 5 softswitch in the media gateway and call session control protocol format as claimed in claims 1, 14, and 21.

Kaczmarczyk lacks such disclosure, teaching, or suggestion. Kaczmarczyk is directed to routing a telephone call originating from a plain old telephone network (PSTN) to an Internet protocol (IP) network and vice versa using a series of programmable tables and a SS7-to-SIP signaling conversion function. Specifically, Kaczmarczyk discloses using a call routing and signaling system (INIP) **16** as a media gateway controller of a

media gateway **18**, wherein INIP **16** handles signaling information and media gateway **18** handles media streams. (See Figure 1 of Kaczmarczyk.)

The Official Action alleges a combination of the signaling gateway INIP **16** and media gateway **18** of Kaczmarczyk, disclosed in column 4, line 60 – column 5, line 54 and column 1, line 37 – column 2, line 25, teaches the claimed device as a gateway. Respectfully, Applicants disagree. INIP **16** in Kaczmarczyk is simply a media gateway controller. It does not provide a gateway function that converts between a media gateway control protocol and a BLES protocol as claimed. Rather, it controls media gateway **18** using a media gateway control protocol in response to call setup signaling received from the PSTN and IP networks. If the INIP **16** of Kaczmarczyk is combined with the CO-IWF of TR-036, the result is a media gateway controller that controls a media gateway for media interworking between PSTN and IP network and an interworking function that converts between PSTN and BLES signaling protocols. The combination does not convert between a media gateway control protocol and a BLES protocol or provide services over a BLES network in response to media gateway control protocol instructions as claimed. Accordingly, it is respectfully submitted that the rejection of claims 1-5 and 7-26 as unpatentable over TR-036 in view of Kaczmarczyk should be withdrawn.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as unpatentable over TR-036 in view of Kaczmarczyk. This rejection is respectfully traversed.

Claim 6 depends from independent claim 1. As stated above with regard to the rejection of the independent claim 1, TR-036 and Kaczmarczyk fail to teach or suggest a gateway that communicates with a Class 5 softswitch using a media gateway and call session control protocol format usable by a media gateway controller to control a media

gateway, that communicates over a BLES network using a BLES protocol format, and provides services over the BLES network in response to instructions received from the Class 5 softswitch in the media gateway and call session control protocol format. Accordingly, for the reasons set forth above with regard to the rejection of claim 1, it is respectfully submitted that the rejection of claim 6 should be withdrawn.

CONCLUSION

In light of the above Amendments and Remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. **50-0426**.

Respectfully submitted,

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